IN THE CLAIMS:

1-45. (canceled)

46. (new) A method for expressing in a determined eucaryotic cell, a polypeptide capable of interacting with a nucleotide sequence designated IPCS which comprises the DNA sequence AAATGNNNNC, wherein N means any nucleotide (G, A, C or T(U)), and capable of acting as a positive transcription factor for the transcription of a nucleotide sequence placed under the control of said (PCS sequence and present in said eucaryotic cell, comprising expressing in said eukaryotic cell a polynucleotide comprising a nucleotide sequence selected from the group consisting of:

(i) a nucleotide sequence comprising the DNA sequence of SEQ ID NO: 1, and represented in Figure 14A, or of SEQ ID NO: 3 and represented in Figure 14B;

(ii) a nucleotide sequence encoding a polypeptide having the amino-acid sequence of SEQ ID NO: 2, and represented in Figure 15A or encoding a polypeptide having the amino-acid sequence of SEQ ID NO: 4 and represented in Figure 15B;

(iii) a nucleotide sequence comprising the DNA sequenceof SEQ ID NO: 5, and represented in Figure 14C ;

(iv) a nucleotide sequence encoding a polypeptide having the amino-acid sequence of SEQ ID NO: 6, and represented in Figure 15C;

(v) a nucleotide sequence derived from sequence defined under (i), (ii), (iii) or (iv) wherein said sequence is modified particularly by deletion, addition or substitution of one or more nucleotides providing that the resulting nucleotide sequence encodes a polypeptide capable of binding said nucleotide sequence designated IPCS.

47. (new) The method of claim 46 wherein the expressed polypeptide acts as a positive transcription factor for a gene involved in a process selected from the group consisting of control of cellular growth, cellular proliferation, cellular differentiation or cellular apoptosis.

48. (new) The method according to claim 46, wherein the nucleotide sequence comprises the cDNA corresponding to a 2.5kb coding sequence of the transcript of the PRDII-BF1 gene.

49. (new) The method according to claim 48, wherein a start codon is added upstream from exon III of the PRDII-BF1 gene.

50. (new) The method according to claim 48, wherein the nucleotide sequence comprises the succession of exons III, V, VI, VII, VIII and IX of the PRDII-BF1 gene, said nucleotide sequence

being devoid of exon IV of said PRDII-BF1 gene in the case of GAAP-1 and containing the first 45 nucleotides of exon IV in the case of GAAP2.

51. The method according to claim 46 in which the nucleotide sequence codes for a GAAP-1 polypeptide comprising the amino acid sequence of SEQ ID NO: 2 or 4 or for a GAAP-2 poiypeptide comprising the amino acid sequence of SEQ ID NO: 6.

52. (new) the method according to claim 46, wherein the nucleotide sequence codes for a variant of the GAAP-1 polypeptide or the GAAP-2 polypeptide, said variant being derived from GAAP-1 or GAAP-2 by insertion, deletion or substitution of one or several amino acid residues, provided it retains the property of GAAP-1 or GAAP-2 to bind an IPCS sequence and to act as a transcriptional factor for the for the transcription of a nucleotide sequence placed under the control of said IPCS sequence and present in a eucaryotic cell.

53. (new) The method according to claim 46, in which the nucleotide sequence hybridizes under stringent conditions with the DNA sequence of SEQ ID NO: 1 or 3 or with the DNA sequence of SEQ ID NO: 5.

54. (new) The method according to claim 46, wherein said nucleotide sequence is placed under the control of a promoter sequence selected among constitutive or inducible promoters.

55. (new) The method according to claim 46, wherein the eucaryotic cells are malignant cells.

56. (new) The method according to claim 46, wherein the eucaryotic cells are those of a developed tumor.

57. (new) The method according to claim 46, for the control of cell apoptosis.

58. (new) The method according to claim 46, wherein the positive regulation of transcriptional activity is obtained for a gene selected from the group consisting of p53, IRF1, Rb, p21 (WAF1), p27, wt1, bax, TNF receptor and FAS.

59. (new) The method according to claim 46, wherein the positive regulation of transcriptional activity allows regulation of transcription of several genes in said eukaryotic cell.

60. (new) A polynucleotide comprising the nucleotide sequence comprising the DNA sequence of SEQ ID NO: 1, represented in Figure

14A, said nucleotide-sequence being devoid of the sequence forming exon IV in the PRDII-BF1 gene.

61. (new) The polynucleotide of claim 60 which consists of the DNA sequence of SEQ ID NO: 1.

62. (new) The polynucleotide according to claim 60 which is selected from the group consisting of:

(i) a fragment of the DNA sequence of SEQ ID NO: 1 (Figure 14A), or a fragment of the DNA sequence of SEQ ID NO: 3 (Figure 14B) which can be used as a specific probe to detect the presence of said DNA sequence of SEQ ID NO: 1, 3 or 5 or a mutated sequence thereof, in a sample,

(ii) a nucleotide sequence encoding a polypeptide having the amino-acid sequence of SEQ ID NO: 2, or a nucleotide sequence encoding a polypeptide having the amino-acid sequence of SEQ ID NO: 4 or a nucleotide sequence encoding a polypeptide having the amino acid sequence of SEQ ID NO: 6,

(iii) a nucleotide sequence derived from sequence defined under (i) or (ii) wherein said sequence is modified, especially by deletion, addition or substitution of one or more nucleotides providing that the resulting nucleotide sequence encodes a polypeptide capable of

binding a nucleotide sequence designated IPCS which comprises the DNA sequence AAATGRYKKC, and is capable when used in appropriate conditions, of expressing in a determined eucaryotic cell, a polypeptide interacting with the nucleotide sequence designated IPCS and acting as a positive transcriptional factor for the transcription of a nucleotide sequence placed under the control of said IPCS sequence and present in said eucaryotic cell.

63. (new) A polynucleotide comprising the nucleotide sequence which is contained on plasmid pGAAP1 deposited at the ECACC under accession no. 01052921.

64. (new) A recombinant polypeptide that is the product of the expression in a eucaryotic cell of a nucleotide sequence coding for a polypeptide capable of interacting with the nucleotide sequence designated IPCS and capable of acting as a positive transcription factor for the transcription of a nucleotide sequence placed under the control of said IPCS sequence and present in said eucaryotic cell.

65. (new) A recombinant polypeptide, being the product of the expression in a eucaryotic cell, of a nucleotide sequence according to claim 60.

66. (new) A recombinant polypeptide according to claim 64 which regulates the transcriptional activity of a gene selected among p53 and IRF1 when it is expressed in a eucaryotic cell constitutively expressing said gene.

67. (new) A recombinant polypeptide according to claim 65 which regulates the transcriptional activity of a gene selected among p53 and IRF1 when it is expressed in a eucaryotic cell constitutively expressing said gene.

68. (new) A recombinant polypeptide according to claim 64 which has an apparent molecular weight of 75 kDa by SDS PAGE electrophoresis.

69. (new) A recombinant polypeptide, being the expression product in a mammalian cell, of a nucleotide sequence according to claim 60, said recombinant polypeptide including post translational modification enabled in said eucaryotic cell.

70. (new) The recombinant polypeptide according to claim 64 which comprises the amino acid sequence of SEQ ID NO: 2, 4 or 6.

71. (new) The recombinant polypeptide according to claim 64 which comprises a fragment of the amino acid sequence of SEQ ID NO: 2 provided the polypeptide is capable of interacting with the nucleotide sequence designated IPCS to act as a positive transcription factor for the transcription of a nucleotide sequence placed under the control of said IPCS sequence and present in said eucaryotic cell.

72. (new) A recombinant eucaryotic cell comprising an inserted polynucleotide comprising the nucleotide sequence according to claim 60.

73. (new) The recombinant eucaryotic cell according to claim 72 which expresses the polypeptide encoded by the inserted nucleotide sequence.

74. (new) The recombinant eucaryotic cell according to claim 72 which is a cell expressing genes selected from the group consisting of genes involved in the control of cell growth, genes involved in cell differentiation, genes involved in cell proliferation and genes involved in cell apoptosis.

75. (new) The recombinant eucaryotic cell according to claim 72 which is a malignant cell.

76. (new) A recombinant eucaryotic cell comprising an inserted polynucleotide encoding a polypeptide capable of binding a nucleotide sequence designated IPCS and comprising the DNA sequence AAATGNNNNC, to enable, in appropriate conditions, the expression of a polypeptide capable of interacting with the nucleotide sequence designated IPCS and capable of acting as a positive transcriptional factor for the transcription of a nucleotide sequence placed under the control of said IPCS sequence and present in said eucaryotic cell.

77. (new) The recombinant eucaryotic cell according to claim 72, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 2 or 4 or 6.

78. (new) The recombinant eucaryotic cell according claim 72, which is selected from the group consisting of U937, K562, SK-N-,SH, MCF7, KG1 and TF1.

79. (new) A recombinant vector comprising a polynucleotide according to claim 60.

80. (new) The recombinant vector according to claim 79 which is an expression vector suitable for expression of said polynucleotide in a eucaryotic cell.

81. (new) The recombinant vector according to claim 80 which is suitable for transient or controlled expression of said polynucleotide.

82. (new) The recombinant vector according to claim 80, wherein said polynucleotide is placed under the control of a promoter regulated by a physiologically acceptable compound.

83. (new) The recombinant vector according to claim 80, wherein the transcription of said insert is placed under the control of an exogenous transactivating system.

84. (new) The recombinant vector according to claim 80, which is suitable for gene therapy.

85. (new) The recombinant vector according to claim 84, which is selected from the group consisting of viral, retroviral, lentiviral, poxviral, adenoviral, AAV vectors.

86. (new) A composition suitable for a therapeutic use which comprises a polynucleotide according to claim 60or a recombinant cell according to claim 72, or a recombinant polypeptide according to claim 64.

87. (new) A method of treating a subject comprising administering to said subject the composition according to claim 86 in combination with an antiviral agent or an anticancer agent.

88. (new) The method according to claim 87 wherein the anticancer agent is an immuotherapeutic agent, a chemotherapeutic agent or is radiotherapy.

89. (new) The method according to claim 87, for the treatment of a malignant cell.

90. (new) A method for the *in vitro* detection of a deficient BRDII-BFI gene comprising the steps of:
contacting a probe comprising a polynucleotide having the nucleotide sequence of SEQ ID NO: 1, 3 or 5, or a fragment thereof comprising the zinc finger binding domains corresponding to the domains localized within exon VI of the BRDII-gene, with the DNA of a cell normally constitutively expressing said gene, under stringent conditions,

- detecting the hybridization product of said probe and said cell DNA.

91. (new) A method for *in vitro* detection of a deficient transcriptional activity of genes involved in the control of cell growth, cell differentiation, cell proliferation or cell apoptosis, comprising the step of detecting a deficient production of the transcript of said gene which would normally encode a polypeptide capable of binding an IPCS sequence and as a result would positively regulate the transcription of a nucleotide sequence placed under the control of said IPCS sequence.

92. (new) A method for *in vitro* prognosis of transformation of cells toward a malignant state, which comprises the step of detecting a mutation in the PRDII-BFI gene normally expressed in said cells, or detecting a mutation in the transcript obtained by splicing of said gene, which mutation would result in lack of expression or in an abnormal expression of polypeptide expression product of said PRDII-BF1 gene capable of binding to an IPCS sequence.

93. (new) A method for screening compounds for activity of regulating the transcriptional activity of genes containing an IPCS

sequence in their promoter region, said genes being active in the control of cell growth, cell differentiation, cell proliferation, or cell apoptosis, comprising the steps of:

- contacting said compound with DNA of a cell expressing genes containing an IPCS sequence in their promoter region,
- detecting formation of a DNA-compound complex and assaying its transcriptional activity on said gene containing the IPCS sequence.

94. (new) A method of screening compounds for activity as an agonist of GAAP-1 or of GAAP-2 comprising contacting said compound with a polypeptide of claim 65 and detecting the formation of a complex of said compound and said polypeptide.

95. (new) A method of screening compounds for activity as an antagonist of GAAP-1 or of GAAP-2 comprising contacting said compound with a polypeptide of claim 65 and detecting the formation of a complex of said compound and said polypeptide.

REMARKS

Claims 46-95 are now pending in this application. The claims have been amended to conform them to language appropriate for U.S. examination, to remove multiple dependency, and to correct minor editorial errors.